

PGDbReleveller User Guide

Purpose: PGDbReleveller is designed to recalculate the Streamlevel field in the NHDflowlineVAA table of an ESRI/NHD Personal GeoDatabase.

Input: A valid ESRI/NHD Personal GeoDatabase with a logically correct NHDflow table.

Output: A releveled ESRI/NHD Personal GeoDatabase. A cumulative log file (PGDbReleveller.log) is created/updated after each run with the results of the last releve process.

Program Initialization File

The program initialization file (PGDbReleveller.ini) contains run-time parameters for the PGDbReleveller application. The following values are used for program control and with the exception of MsgLevel should not be changed except as requested by technical support.

```
[ARBSUM]
NumInt=50000
Verbose=0
[LEVEL]
NumInt=50000
Verbose=0
[Working]
KeepFiles=False
[Display]
MsgLevel=1
```

The MsgLevel value in the PGDbReleveller.ini file controls the detail at which status messages in the title bar of the application are displayed. A value of 1 produces minimal messages, 2 produces all possible messages and 0 produces no messages. A message level of 2 will slow processing significantly. The default is 1. This parameter does not affect the display or logging of error messages

Menu Choices

About - Information about PGDbReleveller - Clicking on any of the logos will launch the default browser with that organization's home page. System Info will display information about your system.

Select Data - Provides a file dialog to allow selection of a GeoDatabase to releve.

Delete Log - Deletes the current PGDbReleveller log file.

Help – Displays help for PGDbReleveller

Quit - Closes the PGDbReleveller application.

PGDbReleveller can be run in either batch or interactive mode. In interactive mode, you can invoke the application from Windows Explorer or by creating a short cut on the desktop. In batch mode, supply the name of the MDB to be releveled (with path name) as a line in a DOS batch file e.g.,

D:\PGDbReleveller\PGDbReleveller.exe D:\Data\NHD1234.MDB

No window or taskbar icon is displayed while running in batch mode.

When PGDbReleveller is processing data, it will display various status messages in the title bar at the top of the application window. These non-error messages indicate what step of the program is currently being performed on the selected database.

Error Messages

Message: The file PgdbReleveller.ini is missing from the "Application" directory

Explanation: The initialization file containing program parameters is missing from the directory where PGDbReleveller is installed. In the actual error message, the word **Application** would be replaced by something like **C:\Program Files\PGDbReleveller**. PgdbReleveller.ini can be extracted from the zip file containing the original program files.

Message: "Application"\WorkSkel.mdb is missing

Explanation: The skeleton for the working database is missing from the directory where PGDbReleveller is installed. In the actual error message, the word **Application** would be replaced by something like **C:\Program Files\PGDbReleveller**. WorkSkel.mdb can be extracted from the zip file containing the original program files.

Message: The ARBSUM value for NumInt in file PgdbReleveller.ini is blank.

Explanation: The initialization file has been edited or is corrupted and should be extracted from the zip file containing the original program files and placed in the application directory.

Message: The ARBSUM value for Verbose in file PgdbReleveler.ini is blank.

Explanation: The initialization file has been edited or is corrupted and should be extracted from the zip file containing the original program files and placed in the application directory.

Message: The LEVEL value for NumInt in file PgdbReleveler.ini is blank.

Explanation: The initialization file has been edited or is corrupted and should be extracted from the zip file containing the original program files and placed in the application directory.

Message: The LEVEL value for Verbose in file PgdbReleveler.ini is blank.

Explanation: The initialization file has been edited or is corrupted and should be extracted from the zip file containing the original program files and placed in the application directory.

Message: The No records were found in NHDflowlineVAA for DB – “xxxxxxx.mdb”.

Explanation: The NHDflowlineVAA table in the database to be releveled is empty.

Message: The No records were found in NHDflowfor DB – “xxxxxxx.mdb”.

Explanation: The NHDflow table in the database to be releveled is empty.

Message: Write_Out_Reach failed for DB – “xxxxxxx.mdb”.

Explanation – Multiple Causes:

(1). PGDBreleveler was unable to create the file **Reach.txt** in the application directory. This could be caused by you having the file open in another program while running PGDBreleveler or you don't have write permission to the PGDBreleveler application directory.

(2). There are duplicated COMIDs in the tblNHDFlowline or tblNHDFlowlineVAA table in your database. This will be preceded in the PGDbReleveler.log file by the message: **Error in Function Write_Out_NHDFlowline. Possible duplicate COMID values in NHDFlowline. Unable to process DB - “xxxxxxx.mdb”.**

Message: Write_Out_Flow failed for DB - “xxxxxx.mdb”.

Explanation: PGDBreveler was unable to create the file **Flow.txt** in the application directory. This could be caused by you having the file open in another program while running PGDBreveler or you don't have write permission to the PGDBreveler application directory.

Message: Flow loop found in “xxxxxx.mdb”. Can not releve. (Arbsum returned 1 during processing.)

Explanation: If a particular flow record is used too many times during navigation, it usually indicates a loop and the Arbsum function returns a 1. Look at the bottom of messagearbsum.txt for the flow record that is getting used too often. Examine the flowline network near that flow record to determine where the loop exists in the flow table.

Message: Write Error(n) in level procedure in xxxxxx.mdb”. Can not releve. (Level returned 1 during processing.)

Explanation: PGDBreveler displays this error message if it encounters an unhandled data condition. The values for (n) are from 1 to 7. The only resolution here is to contact technical support. (See below)

Message: Error: Object1_id Not Found for 713 flow record in NHDflowline table.

Explanation: PGDBreveler could not find a 713 flow record in the NHDFlowline table. This is an unhandled data condition. Please contact technical support. (see below)

Message: The "pgdbreveler path name "\Working.txt was NOT imported successfully for DB - “xxxxxx.mdb”

Explanation: The most common cause of this error is a space in the path name of folder where PGDBreveler was installed.

**Message: A NHDflow record exists where neither the FromComID(nnnnnnnn) and the ToComID(nnnnnnnn) are in NHDflowlineVAA for DB - “xxxxxx.mdb”
THESE RECORDS SHOULD BE REMOVED FROM THE DATABASE!**

Explanation: Self-explanatory

Message: This does not appear to be a valid NHDGEO in GEO database or at least the NHDflowline table is missing. Unable to process DB - “xxxxxx.mdb”

Explanation: Self-explanatory

Message: Error n (Error Description) in procedure xxxxxxx of Form xxxxxx Error Source:"Error Source" occurred at line n

Explanation: An unhandled program error has occurred. Please contact technical support. (see below)

Technical Support

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